AMENDMENT TO THE CLAIMS

1. (currently amended) A ~~kind of~~ method for measuring dielectric constant of body ~~endermic~~ tissues under the skin and body impedance based on ~~the~~a method of frequency digital sampling and for evaluating body composition, the steps comprise inputting by keyboard the testee's serial number, height, age, gender, and parameter indicating whether or not an athlete; testee standing on the measuring platform to measure body weight, the signal coming from a weighing sensor being converted to the body weight frequency signal by a weighing signal processing circuit; the oscillating frequency signals related to testee's impedances and dielectric constant of tissues under the skin generating from a positive feedback RC oscillator circuit and being connected to an MCU system for frequency digital sampling; calculating body fat content and total body water by software of the MCU system, and displaying body weight, body fat content and total body water on the display, wherein the said the method further comprises~~comprising~~ the following steps of:

converting the signal coming from the weighing sensor to ~~getting~~ the body weight frequency signal by weighing signal processing circuit ~~of a testee standing on the platform to measure body weight~~;

making the positive feedback RC oscillator circuit connected with two ends of capacitance grid sensors to generate an oscillating frequency related to dielectric constant of body ~~endermic~~ tissues under the skin by positioning testee's soles to contact ~~the~~a capacitance grid sensor on the measuring platform;

making the positive feedback RC oscillator circuit connected with two electrode plates or two ~~(~~groups of~~)~~ electrode plates generate an oscillating frequency related to body impedance by positioning testee's soles to contact the two electrode plates or two groups of electrode

plate~~two (groups of) electrode plates~~ with certain area on the measuring platform;

introducing the switched capacitors with different capacitance values to the said positive feedback RC oscillator circuit to get several oscillating signals with non-fixed different frequencies related to body impedance;

~~inputting by keyboard the testee's serial number, height, age, gender, and parameter indicating whether or not an athlete;~~

inputing the weight frequency signals through the I/O interface of the microprocessor ~~inputting the measured body weight frequency signals,~~coming from weighing signal processing circuit, oscillating frequency signals related to dielectric constant of body ~~endermic~~ tissues under the skin and body impedance signals corresponding to non-fixed different frequencies;

through the software of the microprocessor calculating ~~the body fat content, total body water,~~ the ratio between calculating intracellular water and total body water;

displaying the ~~body weight, body fat content, total body water and~~ ratio between intracellular water and total body water on the display.

2. (currently amended) The method according to claim 1, wherein: one end of the said capacitance grid sensor (Cm) in contact with ~~human's~~ testee's soles is connected with one end of capacitor (Ca); and the other ends of the capacitance grid sensor~~Cm~~ and capacitor~~Ca~~ ~~is~~are respectively connected with the output end of one invertor and input end of the another invertor; and the input end of one invertor is connected with the output end of the another invertor; and wherein oscillating frequency signals related to dielectric constant of body ~~endermic~~ tissues

under the skin is generated.

3. (currently amended) A method according to claim 1, wherein: the input end of one invertor is connected with the output end of the other invertor; and between the joint of the two invertors and the input end of one invertor, the series-wound circuit comprised by resistor (Ra) and body impedance element (Rm) is introduced; and the two ends of the capacitor (Ca) are connected respectively with the two invertors' two ends which are not connected with each other; and wherein oscillating frequency signals related to body impedance is generated.

4. (currently amended) A method according to claim 1, wherein: the body impedance element (Rm) is in series connection with resistor ~~Ra1~~Ra2 and then in parallel connection with resistor Ra~~2~~1; the one end of the circuit in series-parallel connection is connected with the invert end of the D trigger; and the another end is connected with the CD end, CLK end, and GND end of the D trigger; and wherein oscillating frequency signals related to body impedance is generated.

5. (currently amended) A method according to claim 1, comprising the step of: introducing body impedance element (Rm) to said positive feedback RC oscillator circuit; switching and introducing capacitor C1, C2, …..Cn respectively to said positive feedback RC oscillator circuit; getting several oscillating signals with non-fixed different frequencies related to body impedance Rm.

6. (currently amended) A body composition monitor apparatus for measuring dielectric constant of body ~~endermic~~ tissues under the skin and body impedance based on ~~the~~a method of frequency digital sampling, comprising a measuring unit and a display unit, which

above two units comprises a measuring platform, a electrode plate, a weighing sensor, a MCU system, a display, and a keyboard ~~and weighing signal processing circuit, and display unit~~; wherein the said apparatus~~monitor~~ also includes a weighing signal processing circuit that converts the signal coming from weighing sensor to the body weight frequency signal, a feedback RC oscillator circuit for measuring dielectric constant of body tissues under the skin and body impedance and more than one capacitance grid sensors, ~~the said positive feedback RC oscillator circuit for measuring dielectric constant of body endermic tissues and body impedance, the two (groups of ) foot on electrode plates on the platform, at least more than one capacitance grid sensors, microprocessor, display and keyboard;~~ wherein:

the ~~said foot on~~ electrode plate~~s~~ ~~and capacitance grid sensor~~ ~~are~~is connected as a two end impedance element (Rm) with the said positive feedback RC oscillator circuit;

the said positive feedback RC oscillator circuit, weighing signal processing circuit are in electrical connection with a microprocessor~~;~~.

~~the said display, keyboard are in electrical connection with microprocessor.~~

7. (cancelled)

8. (currently amended) Apparatus according to claim 6, wherein: in one connection mode~~in the circuit for measuring dielectric constant of body endermic tissues in~~of the said positive feedback RC oscillator circuit ~~and~~ for measuring dielectric constant of body ~~endermic~~ tissues under the skin, one end of the capacitance grid sensor (Cm) is connected with one end of capacitor (Ca); the other ends of the Cm and the Ca are respectively connected with

the output end of one invertor and input end of the other invertor; resistor (Ra) is in series connection with body impedance (Rm), and the other ends of the series circuit are respectively connected with the input end and the output end of one invertor; the input end of one invertor is connected with the output end of the other invertor.

9. (currently amended) Apparatus according to claim 6, wherein: in one connection mode of~~in the circuit for measuring body impedance in~~ the said positive feedback RC oscillator circuit ~~and~~ for measuring body impedance, the input end of one invertor is connected with the output end of the another invertor; between the joint of the two invertors and the input end of the other invertor, the series-wound circuit comprised by resistor (Ra) and body impedance (Rm) is introduced; the two ends of the capacitor (Ca) are connected respectively with the two invertors' two ends which are not connected with each other.

10. (currently amended) Apparatus according to claim 6, wherein: in one connection mode of~~in the circuit for measuring body impedance in~~ the said positive feedback RC oscillator circuit ~~and~~ for measuring body impedance, body impedance (Rm) is in series connection with resistor (Ra1) and then in parallel connection with resistor (Ra2); the one end of the circuit in series-parallel connection is connected with the invert end of the D trigger; and the other end is connected with the CD end, CLK end, and GND end of the D trigger.

11-14. (cancelled)

15. (currently amended) Apparatus according to claim ~~7~~6, wherein: the said measuring apparatus includes infrared signal emitting circuit; electrical signal is input from the base

electrode of audion (T1); the collectors of audion (T1) and (T2) are connected with one port of infrared emitter; and the other port of infrared emitter is connected with current-limiting resistor (R1); infrared emitter emits real-time infrared data signal; infrared receiver receives the infrared instruction signal emitted by the said display apparatus which is converted to electrical signal and then transmitted from infrared receiver to the base electrode of audion (T3); the collector of audion (T3) is connected with the input level of decoder; the output level of decoder is connected with MCU system of the measuring apparatus.

16. (currently amended) Apparatus according to claim ~~7~~6, wherein: the said display apparatus includes infrared signal transmitting circuit; electrical signal is transmitted from infrared receiver to the base electrode of audion (T7); the collector of audion (T7) is connected with the interface of MCU system of the display apparatus; the interface of MCU system of the display apparatus sends electrical signal to the input interface of encoder, whose output interface is connected with the base electrode of audion (T5); the collectors of audion (T5) and (T6) are connected with one port of infrared emitter; and the other port of infrared emitter is connected with current-limiting resistor (R4); infrared emitter emits infrared instruction signal.